

REMARKS

This application has been carefully reviewed in light of the Office Action dated December 3, 2002 (Paper No. 7). Claims 1 to 19 are in the application, with Claims 18 and 19 being newly-added. Claims 1, 7, 8, 14 and 15 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 16 and 17, which were withdrawn from consideration pursuant to a restriction requirement, have been rewritten so as to depend from Claim 8. Accordingly, re-joinder of Claims 16 and 17 is respectfully requested.

Claims 1, 2, 6 to 9 and 13 to 15 were rejected under 35 U.S.C. § 103(a) over JP 07-235685 (Watanabe). Claims 1, 7, 8, 14 and 15 were rejected under 35 U.S.C. § 103(a) over JP 11-274522 (Ito). Claims 1, 2, 6 to 9 and 13 to 15 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,712,572 (Tamechika). Claims 1, 2 to 4, 7 to 11, 14 and 15 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,300,556 (Yamagishi) in view of Watanabe. The rejections are respectfully traversed.

The present invention as recited by Claims 1 and 7 concerns a method for testing a solar panel including, at least, a solar cell and an outer housing (or a method for inspecting a solar panel generating system having such a solar panel). The method comprises performing one of a withstand voltage test and an insulation resistance test between a live electrical section electrically connected to the solar cell and a conductor section of the outer housing; and thereafter applying a voltage between the live electrical section and the conductor section.

The present invention as recited by Claims 8 and 14 concerns an apparatus for testing a solar panel including, at least, a solar cell and an outer housing (or an

apparatus for inspecting a solar panel generating system having such a solar panel). The apparatus comprises a means for performing one of a withstand voltage test and an insulation resistance test between a live electrical section electrically connected to the solar cell and a conductor section of the outer housing; and a means for applying a voltage between the live electrical section and the conductor section after the one of the withstand voltage test and the insulation resistance test has been performed.

The present invention as recited by Claim 15 concerns a method for manufacturing a solar panel including, at least, a solar cell, a surface protective covering member for encapsulating the solar cell, and an outer housing. The method comprises encapsulating the solar cell with the surface protective covering member; performing one of a withstand voltage test and an insulation resistance test between a live electrical section electrically connected to the solar cell and a conductor section of the outer housing; and thereafter applying a voltage between the live electrical section and the conductor section.

Thus, according to one feature of the invention, a voltage is applied between the live electrical section and the conductor section after the withstand voltage test or the insulation resistance test has been performed. By virtue of this feature, the residual charge from the withstand voltage test or the insulation resistance test can be quickly and effectively reduced. See, for example, page 8, lines 5 to 19 of the present specification.

The applied references are not seen to disclose at least the foregoing feature.

The Office Action cites portions of Watanabe, Ito, Tamechika, and Yamagishi that teach or suggest applying a voltage in order to carry out a withstand voltage test or insulation resistance test. However, this is different from applying a voltage subsequent to the withstand voltage test or insulation resistance test.

As discussed at page 16, lines 2 to 7 and page 16, line 24 to page 17, line 4 of the present specification, the withstand voltage test or the insulation resistance test of the present invention can be carried out by applying a predetermined voltage between the live electrical section and conductive section. Then, after this withstand voltage test or insulation resistance test has been performed, a voltage is applied between the live electrical section and conductive section. See page 17, line 24 to page 18, line 7 of the present specification.

For example, in the Second Embodiment of the present invention, the insulation resistance test is performed using an application voltage of 500 V. Then, after the insulation resistance test, a voltage supplier 107 applies a 1 V and 60 Hz alternating current to remove residual discharge. See page 21, line 21 to page 22, line 12.

In view of the foregoing, the applied art is not seen to teach or suggest the claimed invention, and it is therefore respectfully requested that the Section 103 rejections be withdrawn.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Costa Mesa,
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Respectfully submitted,



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